

Two-frequency information recording in a three-level system using stimulated photon echo

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Abstract

© 2015 Kvantovaya Elektronika and Turpion Ltd. The process of recording and reproducing information in a three-level system using stimulated photon echo is studied as a function of the amount of information embedded in the first and second two-frequency object laser pulses. It is shown that two-frequency information recording leads to an increase in the power of the stimulated photon echo response on one frequency transition and to its reduction on the other.

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Keywords

Amount of information, Information encoding, Stimulated photon echo, Three-level system, Two-frequency information recording